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ABSTRACT

This report explains why reading story books to young children (an activity assumed to help in the acquisition of literacy, although there is no unambiguous evidence in support of this assumption) is likely to be important and reviews the evidence about the role it might play in literacy development. The first section of the report examines distinctions in oral and written language and suggests why written texts contain language structures that could be more difficult to acquire than oral language structures. The second section shows how story book reading activities enable children to link their listening and speaking skills to text comprehension. The third section reviews connections between story book reading and later reader achievement, describing studies that relate home literacy activities with later reading. The fourth section reviews intervention research that connects story book reading interventions to children's beginning reading achievement. One figure and six tables of data and transcriptions of conversations about reading between child and mother and teacher and child are included, and 69 references are attached. (SR)

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Technical Report No. 510

READING STORIES TO PRELITERATE CHILDREN: A PROPOSED CONNECTION TO READING

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Abstract

Parents and teachers of young children are encouraged to read books to children because story book reading is assumed to help in the acquisition of literacy. But because story book reading usually takes place within a host of other valuable literacy activities, there is no unambiguous evidence to support this assumption. The purpose of this report is to explain why story book reading is likely to be important and to review the evidence about the role it might play in literacy development. The first section describes why literacy will be more difficult for children to acquire if they have had few opportunities to hear and discuss stories. The second section explains how story book reading could aid literacy acquisition. The third section explains how story book reading to children is related to later reading achievement, and the fourth section offers evidence for causal links between story book reading to children and later reading success.

READING STORIES TO PRELITERATE CHILDREN: A PROPOSED CONNECTION TO READING

In the United States, we have long assumed that reading story books to young children is important for the acquisition of literacy. At present, story book reading represents a compelling issue because large numbers of children are not good readers. In the face of demands for higher levels of literacy achievement (e.g., Stedman & Kaestle, 1987), how important is reading to children? What evidence is there from research that supports story book reading as a valuable entry step for the acquisition of literacy?

While it is generally accepted that phonological awareness and codebreaking skills are essential for learning to read (Adams, 1990) and that these concepts are acquired in part from alphabet knowledge and analysis of words into sounds (Ehri, 1983; Mason, 1980), it is not known how story listening skills fit into the process. Because the ability to recognize words is an essential but not sufficient aspect of learning to read (Tunmer & Nesdale, 1985), it is conceivable that story book reading fosters listening comprehension, easing story comprehension as well as word recognition processing. Reading to children is likely to make written language features and functions more apparent because it usually takes place while children are discovering the relationships between print and speech and before they are tackling word and letter pattern analysis (Mason, 1984a; Mason & Au, 1990).

Story book reading, although important, cannot take the place of phonological awareness (Cunningham, 1989), nor can it be considered a necessary precursor to literacy. Children who grow up in families where reading to children occurs infrequently are less likely to be successful readers, but they can learn to read (Gerstein & Dimino, 1990; Heath, 1983; Wells, 1986). Moreover, some societies do not engage in the practice of reading to children. S. Sinha (personal communication) cites India as an example of a society where not even children of the educated classes are read to at home or in school.

It is reasonable to suppose that in the United States, given the nature of the English language and our letter- and word-focused beginning reading instruction (Mason, Anderson, Omura, Uchida, & Imai, 1990), reading to children might be a way to introduce literacy (Anderson, Hiebert, Scott, & Wilkinson, 1985). Hearing and discussing texts with literate persons could help young children establish connections between oral language and written text structures and maintain a sense of text meaningfulness (Holdaway, 1979, 1986; Sulzby, 1986a, 1986b). Such connections are valuable because "written language is often decontextualized from a physical context. That is, the meaning must be carried . . . without the oral language aids of paralinguistic cues and a shared physical context" (Purcell-Gates, 1986, p. 262). Moreover, home story book reading usually occurs through mediation by caring adults. A protective umbrella of explanations, interpretations, and clarifications is provided at the right moments by adults who know what their children know and how to connect story information to their children's background experiences.

That children do learn about written language from being read to is evident from the fact that well-read-to-children develop a "book language" way of talking (Chafe, 1982; Chomsky, 1979; Sulzby, 1985; Tannen, 1982). According to Purcell-Gates (1986), not only do these children expect books to be more syntactically integrated than oral language, they mimic book phrases and words in their oral language, even using non-oral word orders such as inversion of the subject and a verb.

Book reading to children provides opportunities to hear new words in meaningful contexts and leads to acquisition of a larger, more fully featured oral vocabulary (Elley, 1989). A large reading vocabulary is not needed in the first one to two years of schooling because children are learning to read texts that have controlled vocabularies. However, by the third or fourth grade, school textbook companies allow many new words to appear in their books. Children who have been read to in the earlier years will be better prepared for the expanded vocabularies in these texts. One study (Humphreys & Davey, 1983)

supports this hypothesis, showing that children's listening vocabulary skills in third grade predict their reading comprehension two years later.

Because book reading to children is a source for the development of listening comprehension (Peterman, 1988) as well as written textual features (Pappas, 1985), it also fosters a way of thinking that enhances reading comprehension (Olson, 1984; Wells, 1985, 1986). These figure into acquisition of effective strategies for text comprehension.

Finally, accumulating evidence from research suggests that book reading to children can ease the process of learning to decode the written word. Repeated readings of books contribute especially to knowledge about the print itself as children become better able to write, spell, and read words (McCormick & Mason, 1989a). Children acquire conventions of print concepts such as directionality of print, word boundaries, and punctuation markers (Clay, 1979; 1985). Conceivably, repeated book reading to children permits them to concentrate on words and letter-sound patterns as they maintain an understanding of the text meaning.

The first section of this report examines distinctions in oral and written language and suggests why written texts contain language structures that could be more difficult to acquire than oral language structures. The second section shows how story book reading activities enable children to link their listening and speaking skills to text comprehension. The third section reviews connections between story book reading and later reading achievement, describing studies that relate home literacy activities with later reading. The fourth section reviews intervention research that connects story book reading interventions to children's beginning reading achievement.

Oral and Written Language Distinctions

Written language contains many linguistic properties that are unlike those of oral language. Although both are marked by variations in formality, written language usually contains the more formal characteristics. The act of writing a text is a slow and deliberate process, and the reading of a text is usually a lonely activity. By contrast, speech is rapid and can be effortless, usually taking place in a social environment. Because the oral and written language processes are so different and produce such different outcomes, as Chafe (1985) discusses, some language structures that are featured in written language occur infrequently in oral language. Because written language comprehension depends in part on understanding the written syntax, it cannot then be assumed that knowledge of oral language structures is sufficient for understanding written language.

Five potential problems presented by oral and written language differences are described next by drawing on Perena's (1984) framework of physical, situational, functional, form, and structural characteristics.

Physical differences. Young children's speech is tied to the concrete world and to an immediate setting, but because written language is not so constrained, children must learn to imagine unfamiliar characters, situations, and events. They must learn to think in terms of a past and future, not merely the present. Although as readers they can review (reread) a message, this is beneficial only if they know where to look in the text, how to place and interpret events, and how to picture and remember actions they have never experienced and people whom they have never met. Complications of unfamiliar causes or effects, event sequences, problems, and intentions may make a text quite difficult to comprehend. How much more difficult learning to read is likely to be, then, for children who have not been exposed to these concepts through books at home.

Ferreiro and Teberosky (1982) found that children vary in their ability to conceive of reading as voiceless and to distinguish between oral conversation and a news item or a fairy tale. Mason, McCormick, and Bhavnagri (1986) noted that children unaccustomed to having stories read to them were bothered by inadequate story book pictures. One child reconciled the problem of a story about a farm that didn't

include a picture of a horse by stating that the (missing) animal must have walked off the page! Other children severely criticized the unrealistic pictures of animals. Older children dealt with the problem of an unfamiliar story line or character by retelling the story in the first person, letting themselves be the protagonist. These examples suggest that children struggle with differences between oral and written language, and that some construct strategies to resolve or lessen the apparent problems.

Situational differences. Interchanges between speakers and listeners are usually face-to-face while writers and readers are usually isolated from each other. Whereas the audience for one's oral language is usually present and well defined, the audience for a written communication is an abstract entity, which the writer might try to personalize by imagining a particular reader. Thus, speakers can make an ongoing assessment of their listeners' attention, while writers only hope that their readers understand their written ideas.

The listener not only hears the talk of the speaker but interprets gestures and facial expressions for added understanding, and the speaker reacts to the listener's nonverbal expressions and comments for feedback on clarity, tone, and impact. If speech referents are unclear, the listener may ask for more information under the implicit turntaking rules of conversation. Compensating tools for writers include language ties such as "this" and "that" after introducing a topic. Subtle connections such as "a. . .the," "John. . .he," "chocolate. . .this/it" are also utilized (Halliday & Hasan, 1976). The reader, then, needs to make backward or forward searches of the text, defer understanding, and continue reading, or even check another source so as to achieve an understanding of the text. Thus, to become effective reading comprehenders, young children need to learn a number of new strategies to search out meaningful text connections. Possibly, some of these strategies are initiated through adult-child interchanges about stories that adults are reading aloud.

Functional differences. People generally use oral language for immediate communication and written language when they wish to communicate with others over time or distance. According to Halliday (1977) children's oral language functions are: instrumental (to get something), regulatory (to control), interactional (to establish social relationships), personal (to express individuality), imaginative (to express fantasy), heuristic (to explore and learn), and informative (to convey information). Children make greater functional use of oral language than written language initially because they don't know how to use written language and because their teachers usually have them focus singularly on the functions of learning to read the written text and on writing to fill in answers to written questions (Mason, 1984b). However, Milz (1985) found that some teachers allow first-grade children to write for a number of different purposes, to establish ownership by labeling, to build relationships through notes and interactive journals, to remind themselves and others using notes to do things, to request information or assistance, to record information, and to create their own stories. Children would have a broader understanding of written texts if they could experience differential functions for written language.

Form differences. At the letter and sound level, the 26 letters of the alphabet are used to represent about 40 sounds in English speech. However, these sounds are complexly characterized with about 70 letters and letter combinations in English orthography (Ehri & Wilce, 1987). For example, the letter *k* almost always has the /k/ sound, but that sound may be represented by at least five letters or letter combinations: *k*, *c*, *ck*, *qu*, and *ch*. Each written letter is a distinct visual form, and each written word is set off with spaces and indentations, punctuation, and capitalization. Oral language has no definite boundaries between phonemes, and even word boundaries may be obscured when we speak informally, as most of us have noticed with "gonna," "dontcha," or "gimme." Thus, many children have difficulty in hearing and then segmenting words into phonemes as well as identifying and matching phonemes with letters. Pointing out words while reading stories to children should make some form differences apparent.

At the word level, oral and written language differences are also considerable. A young child's oral language corpus contains about 3,000 different words, and an average adult may have a speaking vocabulary of about 250,000 words (Hall, Nagy, & Linn, 1984). A typical first-grade reading text may

contain about 300 different words, while the written language corpus in third- through twelfth-grade textbooks contains 5 million or more words (Caroll, Davies, & Richman, 1971). Somewhere between third and fourth grade, it is said that a rapid expansion of the written language corpus occurs. A plausible preparation for this expansion is for adults to read to children, which would enable the children to hear and remember new words in context (Elley, 1989). With many words securely established in listening vocabularies, children should be less overwhelmed when meeting them in new written contexts.

Structural differences. Syntactic structures differ in speech and writing. Speakers tend to be highly redundant, while writers strive to be concise. Speech is also less well structured, as evidenced by the high frequency of incomplete sentences, slang expressions, and meaningless vocalizations that function as place holders and allow time for thought. Writers, by contrast, may edit again and again until their pieces are well structured. In addition, although writers cannot mimic intonation, they can emulate elements of informal speech in some narrative texts, with dialect, contractions, and elliptical phrases. They may also use subordinate and relative clauses, appositive and participial phrases, and passive verb constructions (Leu, 1982).

While knowledge of oral language structures could be a sufficient base for understanding some written stories, knowledge of written language structures based on opportunities to hear others use more formal, book language should be more helpful. Moreover, transfer of discourse comprehension skills from listening to reading should be easier for narratives than for expository texts because narratives contain more oral language structures. Expository texts contain less familiar content and structure (Bock & Brewer, 1985).

Some research suggests that when written text is made more like speech, beginning readers can process it more readily. Amsterdam (1985), who had first-grade children repeat and later recall "primerese" and "natural language" versions of fables, found significantly more meaningful consolidation with the natural language versions of the texts. Allen (1985) found that primary-grade children performed better on inferential comprehension tasks when the texts were closely linked to their oral language. However, these studies do not show whether children make improvements in other reading texts as a result of reading oral language-like texts.

If these five characteristics of language (Perena, 1984) that distinguish oral from written language are made apparent to children during story reading or discussions about the stories, they should be better prepared for written language constructs (Mason & Allen, 1986). Adults, for example, could reread favorite texts, point out physical characteristics of a text they are reading aloud, highlight situational differences, give reasons for listening to a story, talk about print and new words in texts, and rephrase unfamiliar written text structures.

Story Book Reading Activities That Link Oral and Written Language

Adults can mediate the written language as they read to children and listen to their retellings. The supporting systems that adults offer are subtle, but the salient features can be uncovered through analyses of transcribed adult-child talk about books. The research described next presents examples of adult-child, book-focused interchanges. The first example is from audiotaped sessions of a four-year-old child of parents with professional-level occupations retelling the same story (Lartz & Mason, 1988). The second example is from a set of videotapes of Head Start mothers who read predictable books with their children and helped them learn to recite the books. The third example is from videotaped sessions of teachers reading stories to their kindergarten classes (Mason, Peterman, Powell, & Kerr, 1989). These studies illuminate the roles adults as well as children play in clarifying text meaning and making written language more accessible.

Retelling a story. The process of retelling a story many times was traced with one kindergarten child, Jamie (Lartz & Mason, 1988). After an adult read the story *Danny and the Dinosaur* by Syd Hoff (1958) to Jamie, she handed the book to her and asked her to retell it. Then, for the next seven weeks

in once-a-week sessions, Jamie's retellings were audiotaped as she leafed through the book. The adult did not reread the book, and she avoided asking questions so that the child's emerging strategies for constructing sensible retellings would be determined by the child. However, she answered all of Jamie's questions and kept her on the task of retelling the whole story during each session. Thus, the child's comments and questions elucidated her own attempts to distinguish oral from written language and to solve the riddle of making written language make sense.

Table 1 presents Jamie's retellings for one text segment. It depicts some of the problems she struggled with to make the text fit with the pictures, the story line, and eventually, the print itself. All of the adult's comments and responses to the child are in brackets. Jamie's retellings and reading attempts are in quotes, with subquotes for the invented dialogue.

[Insert Table 1 about here.]

As Jamie retold the story, particularly during the first few sessions, she made heavy use of the pictures in order to connect the characters with the series of events in the story. Presumably because she had been read to frequently, Jamie did not ask about obvious oral and written language differences. Except for one mild objection to this repetitive task (asking, "Don't you have any other books?"), she did not need to be told a function for retelling the story. Over the sessions, her recollections usually sounded like written language structures, and her vocabulary frequently mirrored words from the text. Because she had been read the story only once, most of the phrases were her own inventions. In Session 4, for example, she said, "Then a quiet voice said." In Session 6, her written story-like dialogue included, "I wish I could play with them if they were real." During the last two sessions, she began to focus on the print itself, asking for help to read and beginning to reconcile words she knew were on the page with her sense of the text. Even then, however, she did not attempt to read every word but chose instead to mix word reading with story telling. The adult supported the child by establishing and holding her to the task, answering all of her questions, and by responding to her comments about the text.

Most of Jamie's retellings involved merging pictures and remembered text events with written language-like elaborations. This story book activity was providing the child with opportunities to operate with written language forms and structures. When the story line made sense and seemed to fit the context, she also began to search for and use words that appeared in the text, suggesting that the story book activity also fostered word analysis and letter-sound analysis. However, this did not mean that she had learned to read words out of context. In the last session, Jamie retold 81% of the words from several sentences, but when the sentences along with the pictures were given out of order, she could say only 61% of the words. When the same sentences were given without their pictures, she identified only one word, "Danny." Thus, although the child showed competency in mimicking written language structures and identifying words with the supporting picture and story line context, she could not read words out of context.

Low-income parent-child story book reading activity. To understand how parents in low-income families might help their children acquire background concepts for learning to read, text materials were sent home for parents to read to their children at home. Parent-children book reading interactions were videotaped and transcribed (Kerr, Mason, & McCormick, in preparation). The question was whether mothers, many of whom were themselves poor readers and who had not often read stories aloud to their children, would effectively help their children make sense of written language features and learn to recite the text. Tables 2 and 3 show two of the mother-child interactions, using the predictable book *Snowman* by McCormick and Mason (1989b). The book contained the following text and illustrations.

Page 1 text: One big snowball. [Picture of large snowball.]
Page 2 text: Two big snowballs. [Picture of two snowballs.]
Page 3 text: Eyes and nose. [Picture includes button eyes and carrot nose]
Page 4 text: Great big smile. [Picture includes upturned mouth]
Page 5 text: Hi Frosty. [Picture includes scarf and hat on snowman]

[Insert Tables 2 & 3 about here.]

The Table 2 transcript shows that the child paid attention to picture information rather than the print when this story was read. The mother accepted the child's preference for understanding the text through pictures, but occasionally helped her connect the picture to the print by pointing to one and then the other. She repeatedly asked the child to label pictures, and these labels were often the same as the printed words. She did not give a reason for reading but did orient the child to the text as a whole by asking what the book was about.

The Table 3 transcript shows a mother providing a similar focus on the meaning of the text. This mother encouraged her child to see a reason for reading the book, namely, to learn how to build a snowman. She pointed to text and picture to help him focus on the pictures and to connect pictures with the print, and told him, "It says. . ." She also provided many situational cues by interpreting, rephrasing, and relating the text to the child's experiences. Although ignoring the printed words, the child did pay attention to the whole story and often commented appropriately.

Both mothers dealt with some of the oral-written language distinctions by pointing to picture and print, by asking questions about the text ideas, and by encouraging the child to expand on them. Each used nonverbal and verbal cues to help her child focus on the right information and stay on task. Each elaborated as she read the text to hold the child's attention and keep the text meaningful. Each added information to tie the text with the child's experiences. Thus, the mothers helped their children interpret picture information within the story context, they informally introduced the text itself, allowing the children to attend to pictures and made sure they understood the vocabulary. In so doing, both children began learning about written language features and were able to take over some of the book reading by holding the book, turning the pages, and repeating some of the written text. Later transcripts show that these children did learn to recite the texts.

Kindergarten teacher/class story reading. Children can learn when parents read to them but is it possible for teachers to carry on valuable story reading interactions with whole-class groups? To help answer this question, six teachers agreed to be videotaped as they read three children's books to their class (Mason, Peterman, & Kerr, 1989; Mason, Peterman, Powell, & Kerr, 1989). Two of the teachers' interactions with students as they read the story *Strega Nona* by Tomie de Paola (1975) are excerpted in Table 4. In these transcripts, T refers to the teacher, C to one or more children. Remarks in brackets with quotation marks indicate text being read by the teacher. Teachers' actions are in the right-hand column.

[Insert Table 4 about here.]

Book reading lessons in these kindergartens were found to contain a three-part routine. Before reading the book, teachers pointed to the title and read it and then readied children for the text content. They also described reasons for listening. During reading, they elaborated on the text to clarify story events and asked questions about what was meant, highlighting new vocabulary terms and rephrasing text segments that they thought children would not understand. After reading, they reviewed the listening goals, usually by asking questions. A discussion of the story sequence and resolution often followed in which the text structure was reviewed. Some arranged for follow-up activities in which children wrote words to extend their print knowledge. The transcripts indicate that teachers do try to help children understand written language constructs. Also, follow-up evaluations of children's recall of the story indicate that the nature of the classroom discussion that their teacher had led did affect children's recall of the story.

These studies indicate that story book reading does provide oral-written language links. It can be carried out at home and in school and can have a positive effect on children's written language development. Adults can capture children's attention with written stories and help them focus on story ideas and some of the printed words. They can lay out functional goals for listening, clarify story

information with elaboration and syntactic structures with rephrasing, and review the story to make the story structure understood. Thus, it appears that the compelling activity of listening to a story can lead children to a better understanding of complex written language forms and to a deeper interpretation of story ideas.

Connections Between Story Reading and Later Reading Achievement

Although story reading to children can be connected to ongoing comprehension and recall, connections to later reading achievement are more tenuous. One reason is that reading to children is embedded in a package of viable emergent literacy activities. Research shows that family factors, particularly socioeconomic status (SES) and availability of print in the home, are correlated with reading achievement (Thorndike, 1976). Family factors that are more narrowly defined (White, 1982), such as academic guidance, attitude toward education, parent aspirations for their children, conversations in the home, reading materials, and cultural activities, contribute more directly to early reading achievement and account for more variance than does SES. Iverson and Walberg (1982), in a review of 18 cross-national correlational studies of school-aged children, also found that ability and achievement are closely linked to intellectual stimulation in the home and to the sociopsychological environment, namely, academic guidance, achievement, family intellectuality, work habits, and language, rather than to broader measures of parent occupation and amount of education. Share, Jorm, Maclean, Matthew, and Waterman (1983), who analyzed the relationships among children's early reading achievement, language ability, SES, and home atmosphere, concluded,

> [F]amilies of children who have higher early reading achievement at school entry tend to engage in more literary activities, prefer educational non-commercial television viewing, have higher occupational status and higher educational aspirations for their children. [A rich educational environment contributes by] providing oral language skills and to a lesser extent by providing specific reading skills. (p. 85)

Overall, then, parents who maintain a literate atmosphere for their children, in which story book reading is one of many components, are likely to have children who are more successful readers.

Another possible reason for so few reported positive effects of reading to children is that the effects are more directly connected to later comprehension skills. However, few longitudinal studies in reading have been initiated in the preschool years, when parents read to their children. A study by Wells and his colleagues (Moon & Wells, 1979; Wells, 1981, 1982, 1986) is an exception. A group of 32 children were followed from age 18 months until age 10 years, with data collected from parent-child conversations, parent interviews, child interviews, and assessments by teachers and researchers. The Moon and Wells study revealed high correlations, ranging from .55 to .79, that connected reading at age 7 with preschool knowledge of literacy, parent interest in literacy, and parents' quality of feedback and richness of interaction with their children. Wells (1981) found that reading at age 7 was also connected to children's language before age 4, a range of preschool activities, preschool interest and concentration on literacy, and story comprehension. Wells (1982) indicated that listening to a story read aloud during parent conversations at age 3 was significantly associated with oral language ability and knowledge of literacy at age 5 and reading comprehension at age 7. Wells (1986) described a close association between reading achievement at age 7 and at age 10. Thus, although the reports are based on a single, small-sample study that included several retrospective analyses, story reading during the preschool years was found to be linked to later reading achievement. Other studies of this nature are needed to confirm the causal connection.

A third reason that story reading to children has not been definitely connected to reading achievement is that beginning reading tests emphasize letter and word recognition. One explanation for a focus on word recognition was articulated by Lesgold, Resnick, and Hammond (1985): "We can consider reading as consisting of the skills that underlie listening plus word recognition skills. The listening skills are already appearing spontaneously by the time children begin to read, so effort should center on word

recognition" (p. 109). But is this a reasonable assumption? Listening skills could vary and be partly due to storybook reading. Thus, storybook activity at home could be an unmeasured correlate of listening skills as well as a predictor of children's success at learning to read. If oral language competencies are differentiated through vocabulary and listening comprehension tests, possible differences in home literate atmosphere and book reading activity could be evaluated. Results might show that differences in later reading are closely connected to early listening skills. This possibility was discussed in the next study.

In the first report of a longitudinal study of 100 children (Mason & Dunning, 1986), children from two schools were tested at the beginning and end of the kindergarten and first-grade years. Parents filled out a questionnaire regarding their support for literacy and their children's involvement in literacy. Questionnaire items that were moderately correlated with later reading test variables included the regularity of reading to children, the number of children's books in the home, the frequency of reading and writing by the children, the frequency of help in reading and writing by the parents, and the frequency of story telling at home. By contrast, the amount of time a child spent watching television was negatively correlated with reading (Table 5).

[Insert Table 5 about here.]

A measure of language understanding was obtained at the beginning of kindergarten. Children were tested on their abilities to define words, classify familiar concepts, and form analogies. They also tried to repeat written-language-like sentences and they chose answers to questions after listening to brief stories. These variables clustered into a single factor in a factor analysis, language understanding. This factor was strongly correlated with beginning reading. A second factor, oral language fluency, was also obtained, measured principally by children's mean length utterance when they told stories from pictures.

Children were tested at the beginning and end of kindergarten and first grade with a test developed by Mason and McCormick (1979). The test included measures of letters, letter-sounds, words, and stories with tasks of letter naming, spelling common words, reading common words, reading pseudowords, reading environmental print words, and reading and commenting on stories. In the kindergarten tests, most of the words and all of the pseudowords were one syllable, consonant-vowel-consonant patterns. In the first-grade tests, more difficult words and two stories were added for children to read, and letter naming and environmental print word reading were dropped. At the end of first grade, children also recalled a story they had heard and answered probe questions about it.

Factor analysis determined that two factors described reading competency at the beginning and end of kindergarten (Times 1 and 2). One factor contained spelling, letter, and common and pseudoword recognition tasks and the other contained environmental print labels. At the beginning of first grade (Time 3), one factor described all of the subtests. Included in this variable were tasks of spelling, word recognition, story reading accuracy, and responses to questions about two simple stories. At the end of first grade, two factors could be distinguished by the factor analysis. Spelling and all word recognition tasks formed one factor and reading and listening comprehension answers and the story recollection formed the other factor. Intercorrelations among these factors are listed in Table 6.

[Insert Table 6 about here.]

Multiple regression analyses were carried out to predict reading achievement at each time period. The beginning of kindergarten language measures were entered as independent variables to predict Time 1 reading. Thereafter, the language variables, parent questionnaire variables, and all preceding reading test variables were allowed to enter as independent variables to predict reading competency at each subsequent time. The parent questionnaire variables were included as predictors from Time 2 on.

Decoding at each testing time was predicted primarily by the earlier reading test. However, comprehension at the end of first grade was predicted by children's entering kindergarten language understanding. A diagram of the model (Figure 1) summarizes the results of the regression analyses.

Beta weights are shown above the lines connecting significant predictors of the variables at each time period. All variables that entered the equations with probabilities < .05 are represented in the model.

[Insert Figure 1 about here.]

Children's emerging reading knowledge and skill at the beginning of kindergarten is represented by decoding (letter and word reading, spelling, and pseudoword reading) and by environmental print recognition. These are correlated with the five subtests making up language understanding, that is, by listening comprehension, sentence repetition, word definition, classification, and analogy ($r = .59$). At the end of kindergarten, children's emerging reading competency is predicted by the earlier decoding measures, language understanding, and parent questionnaire items that describe frequency and range of home reading and writing activity. The language understanding factor continues to be correlated with decoding ($r = .57$).

Home reading and writing activity during kindergarten is moderately correlated at .47 with decoding at the beginning of first grade, but offers no additional predictive effect on the model then or at the end of first grade. Thus, children who learn to recognize and spell words in kindergarten are the ones with better language understanding skills and the ones who are more involved in literacy activities at home. These children continue with above-average performance in decoding when they enter first grade, and these later tests serve as more effective predictors of Time 4 reading ability.

An important finding is that at the end of first grade, children's reading and listening comprehension responses are highly predicted ($r = .63$) by the entering kindergarten composite language understanding score. This effect indicates that children's entering kindergarten ability to define and classify words and use and remember book language explains in large measure their ability to retell and answer questions about stories. Decoding is predicted principally by the preceding decoding tasks but also by the school the children attended. Children in the school with an instructional emphasis on phonetic analysis perform somewhat better. Inexplicably, children's entering oral language fluency also predicts decoding.

This study reveals that young children's oral language understanding is connected to decoding in kindergarten and first grade and to story comprehension at the end of first grade. Moreover, it is moderately correlated with all of the home story book reading experiences: a correlation of .39 to reading to children at home, of .31 with a range of reading and writing activities at home, and of .27 with the number of books (Table 5). Thus, language understanding is also associated with parent-child book reading.

Future research needs to determine the extent to which reading stories to children at home contributes to language understanding and predicts later reading comprehension. These findings appear to be at variance with the Lesgold et al. (1985) longitudinal study in which only "word-level skills facilitate the acquisition of comprehension skills" (p. 132). Although the authors admit the possibility of "another unidentified factor that first causes word recognition and later comprehension skill" (p. 132), their data did not include oral language measures. Possibly, differences in children's language understanding is the unidentified other factor.

Intervention Research Connecting Story Book Reading with Reading Achievement

If reading stories to children could benefit early reading development, then intervention for children who are not read stories at home ought to make a difference. The remaining section reviews studies of book reading interventions. The studies, which involve children who might not otherwise be read to at home, help to document that reading to children at home or in school has a positive effect on reading achievement.

Feitelson, Kita, and Goldstein (1986) had kindergarten teachers in Israel read to their students three times a week for four months. Matched control classrooms engaged in group games. Posttests

indicated that children who were read to better understood stories, were more attentive to picture clues, were better able to infer causal relationships, and could tell more connected stories. In a second study, teachers of first-grade children either read to their students for the last 20 minutes of each weekday or continued their standard reading and writing instruction. At the end of six months, several posttests were administered. These included oral reading of an unfamiliar expository passage, answering comprehension questions after silently reading five short texts, and telling a story from a sequence of four pictures. Children who were read to in school produced significantly fewer word reading errors, had higher comprehension scores, and used more complex language in story telling.

Hewison and Tizard (1980) and Tizard, Schofield, and Hewison (1982) carried out a study with lower class children in England. They found that sending books home for a year made a significant improvement in children's reading. Parents who would not otherwise read to their children were found to advance their children's reading.

McCormick and Mason (1989a) worked with children of low-income families in rural central Illinois communities. Simple-to-read predictable books were sent to half of the families and the others received rhyming couplets. Parents were asked to read and reread the materials with their children. Predictable books were found to be the more effective materials. Tests of later story reading, spelling, and an ability to read words out of context revealed superior reading performance for children who had received the books, and benefits were maintained into first grade. This work has been subsequently extended to children of low-income inner city schools (Mason, Kerr, McCormick, & Sinha, in press) and to children in small towns and fishing villages in Newfoundland (Phillips, Norris, Mason, & Kerr, in press). First-year results indicate positive benefits accruing from shared book reading opportunities at home.

Implications

It appears that preschool children can learn a great deal about how to read by listening to and discussing stories with adults. The transcript examples suggest how this could take place. Children at first may be coached regarding what to listen to and look at and how the information is connected to what they know. They may be helped to understand and interpret written language structures, and they sometimes may be given hints about word forms. They may memorize texts that are read to them repeatedly. With this support, then, children can build a repertoire of concepts about written language structure and strategies for remembering and comprehending texts. When the text ideas are very familiar and understandable, children may turn to analysis of the print. Children can then stretch toward word recognition as they repeatedly hear and retell a story, even though possessing meager word recognition skills. If their story remembering is quite close to the actual text, it is a small step to render a correct reading. Thus, families probably do help their children benefit from story book reading, and teachers probably help whole classes of preliterate children understand and remember stories.

Transcript examples of story reading sessions, correlational analyses and models of reading development, and intervention research suggest that reading stories to children is linked to later reading success, although not without appropriate coaching and support from more knowledgeable adults. Story book reading acquaints children with complex information about written language forms and structures as well as strategies for reading. The activity takes place within a meaningful context, and parents or teachers provide support by showing children how to read and by pointing out important and interesting written text characteristics. Simple stories make it possible for children to memorize a story and pay attention to the print. Repeated readings of favorite stories allow children to have the meaning well in hand before working on the printed words. And, of course, complete stories keep the task whole and more meaningful, which eases interpretation and provides opportunities for context-supported text analysis.

Research needs to show further connections between the course of early reading development and opportunities to listen to and talk about books. The extent to which story book reading at home affects written language understanding competency and later reading and the interplay between story book

reading and word recognition should be pursued. The extent to which reading to children also ought to include story discussion, story rereading, story reciting, and retelling, is also important. Finally, for children who are seldom read to at home, it is important to know how these techniques can be fostered in the home and integrated into kindergarten and first-grade instruction.

References

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: The MIT Press.

Allen, J. (1985). Inferential comprehension: The effects of text source, decoding ability, and mode. *Reading Research Quarterly, 20*, 603-615.

Amsterdam, L. (1985). *Elicited imitation: A comparison of the effects of text features*. Paper presented at the National Reading Conference, San Diego.

Anderson R. C., Hiebert, E. H., Scott, J. A., & Wilkinson, I. A. G. (1985). *Becoming a nation of readers: The report of the Commission on Reading*. Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Bock, J. K., & Brewer, W. (1985). *Discourse structure and mental models* (Tech. Rep. No. 343). Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Caroll, J., Davies, P., & Richman, B. (1971). *Word frequency book*. Boston: Houghton Mifflin.

Chafe, W. (1982). Integration and involvement in speaking, writing, and oral literature. In D. Tannen (Ed.), *Spoken and written language: Exploring orality and literacy, Vol. IX. Advances in discourse processes*. Norwood, NJ: Ablex.

Chafe, W. (1985). Linguistic differences produced by differences between speaking and writing. In N. Torrance, D. Olson, & A. Hildyard (Eds.), *Literacy, language, and learning* (pp. 105-123). Cambridge: Cambridge University Press.

Chomsky, C. (1979). Approaching reading through invented spelling. In L. B. Resnick and P. A. Weaver (Eds.), *Theory and practice of early reading* (Vol. 2, pp. 43-65). Hillsdale, NJ: Erlbaum.

Clay, M. (1979). *Reading: The patterning of complex behavior*. Portsmouth, NH: Heinemann.

Clay, M. (1985). *Early detection of reading difficulties* (3rd ed.). Portsmouth, NH: Heinemann.

Cunningham, A. (1989). Phonemic awareness: The development of early reading competency. *Reading Research Quarterly, 24*, 471-472.

de Paola, T. (1975). *Strega Nona*. Englewood Cliffs, NJ: Prentice Hall.

Ehri, L. C. (1983). A critique of five studies related to letter-name knowledge and learning to read. In L. M. Gentile, M. L. Kamil, & J. S. Blanchard (Eds.), *Reading research revisited* (pp. 143-153). Columbus, OH: Charles E. Merrill.

Ehri, L., & Wilce, L. (1987). Does learning to spell help beginners learn to read words? *Reading Research Quarterly, 22*, 47-65.

Elley, W. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly, 24*, 174-187.

Feitelson, D., Kita, B., & Goldstein, Z. (1986). Effects of reading series stories to first graders on their comprehension and use of language. *Research in the Teaching of English, 20*, 339-356.

Ferreiro, E., & Teberosky, A. (1982). *Literacy before schooling*. Portsmouth, NH: Heinemann.

Gerstein, R., & Dimino, J. (1990). Reading instruction for at-risk students: Implications of current research. *OSSC Bulletin, 33*(5).

Hall, W., Nagy, W., & Linn, R. (1984). *Spoken words: Effects of situation and social group on oral word usage and frequency*. Hillsdale, NJ: Erlbaum.

Halliday, M. A. K. (1977). *Explorations in the functions of language*. New York: Elsevier North-Holland.

Halliday, M., & Hasan, R. (1976). *Cohesion in English*. London: Longman.

Heath, S. B. (1983). *Ways with words: Language, life and work in communities and classrooms*. New York: Cambridge University Press.

Hewison, J., & Tizard, J. (1980). Parental involvement and reading attainment. *British Journal of Educational Psychology, 50*, 209-215.

Hoff, S. (1958). *Danny and the dinosaur*. New York: Harper & Row.

Holdaway, D. (1979). *The foundations of literacy*. New York: Ashton Scholastic.

Holdaway, D. (1986). The structure of natural learning as a basis for literacy instruction. In M. Sampson (Ed.), *The pursuit of literacy: Early reading and writing* (pp. 56-72). Dubuque, IA: Kendall/Hunt.

Humphreys, L. G., & Davey, T. C. (1983). *Anticipation of gains in general information: A comparison of verbal aptitude, reading comprehension, and listening* (Tech. Rep. No. 282). Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Iverson, B., & Walberg, H.(1982). Home environment and school learning: A quantitative synthesis. *Journal of Experimental Education, 50*, 144-151.

Kerr, B., Mason, J., & McCormick, C. (in preparation). *Literacy discourse in shared reading events*. Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Lartz, M., & Mason, J. (1988). Jamie: One child's journey from oral to written language. *Early Childhood Research Quarterly, 3*, 193-208.

Leu, D. (1982). Differences between oral and written discourse and the acquisition of reading proficiency. *Journal of Reading Behavior, 14*, 111-125.

Lesgold, A., Resnick, L., Hammond, K. (1985). Learning to read: A longitudinal study of word skill development in two curricula. In G. Mackinnon & T. Waller (Eds), *Reading Research: Advances in theory and practice, Vol. 4*. New York: Academic Press.

Mason, J. (1980). When do children begin to read?: An exploration of four-year-old children's letter and word reading competencies. *Reading Research Quarterly, 15*, 203-227.

Mason, J. (1984a). Early reading: A developmental perspective. In P. David Pearson (Ed.), *Handbook of Research in Reading* (pp. 505-544). New York: Longman.

Mason, J. (1984b). A question about reading comprehension instruction. In G. Duffy, L. Roehler, & J. Mason (Eds.), *Comprehension instruction: Perspectives and suggestions* (Chap. 4). New York: Longman.

Mason, J., & Allen, J. (1986). A review of emergent literacy with implications for research and practice in reading. In E. Rothkopf (Ed.), *Review of Research in Education* (pp. 3-48). Washington, DC: American Educational Research Association.

Mason, J., Anderson, R., Omura, A., Uchida, N., & Imai, M. (1990). Learning to read in Japan. *Journal of Curriculum Studies, 21*, 389-407.

Mason, J., & Au, K. (1990). *Reading instruction for today* (2nd ed.). Glenview, IL: Scott Foresman.

Mason, J., & Dunning, D. (1986, April). *Toward a model relating home literacy with beginning reading.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Mason, J., Kerr, B., McCormick, C., & Sinha, S. (in press). Shared book reading in an early start program for at-risk children. Annual Yearbook of the National Reading Conference.

Mason, J., & McCormick, C. (1979). *Testing the development of reading and linguistic awareness* (Tech. Rep. No. 26). Urbana-Champaign: University of Illinois, Center for the Study of Reading.

Mason, J., McCormick, C., & Bhavnagri, N. (1986). Lesson negotiation between a teacher and preschool children. In D. Yaden & W. S. Templeton (Eds.), *Metalinguistic awareness and beginning literacy: Conceptualizing what it means to read and write.* Portsmouth, NH: Heinemann.

Mason, J., Peterman, C., Powell, B., & Kerr, B. (1989). Reading and writing attempts by kindergarten children after book reading by teachers. In J. Mason (Ed.), *Reading and writing connections* (pp. 105-123). Newton, MA: Allyn & Bacon.

Mason, J., Peterman, C., & Kerr, B. (1989). Reading talk: How teachers read to kindergarten children. In D. Strickland & L. Morrow (Eds.), *Emerging literacy: Young children learn to read and write.* Newark, DE: International Reading Association.

McCormick, C., & Mason, J. (1989a). Fostering reading for Head Start children with little books. In J. Allen & J. Mason (Eds.), *Risk makers, risk takers, risk breakers: Reducing the risks for young learners* (pp. 154-177). Portsmouth, NH: Heinemann.

McCormick, C., & Mason, J. (1989b). *Little books.* Glenview, IL: Goodyear Press.

Milz, V. (1985). First graders' uses for writing. In A. Jaggar & M. Smith-Burke (Eds.), *Observing the language learner.* Newark, DE: International Reading Association.

Moon, C., & Wells, G. (1979). The influence of home on learning to read. *Journal of Research in Reading, 2*, 53-62.

Olson, D. (1984). "See! Jumping!" Some oral language antecedents of literacy. In H. Goelman, A. Oberg, & F. Smith (Eds.), *Awakening to literacy* (pp. 185-192). Portsmouth, NH: Heinemann.

Pappas, C. (1985). *Learning to read by reading.* Paper presented at the annual meeting of the National Reading Conference, San Diego.

Peterman, C. (1988). *The effects of story reading procedures collaboratively designed by teachers and researcher on kindergartners' literacy learning.* Unpublished doctoral dissertation, University of Illinois, Urbana-Champaign.

Perena, K. (1984). *Children's writing and reading: Analyzing classroom language*. Oxford, England: Basil Blackwell.

Phillips, L., Norris, S., Mason, J., & Kerr, B. (in press). *Effect of early literacy intervention on kindergarten achievement*. Annual Yearbook of the National Reading Conference.

Purcell-Gates, V. (1986). Three levels of understanding about written language acquired by young children prior to formal instruction. In J. Niles (Ed.), *Solving problems in literacy: Learners, teachers, and researchers* (pp. 259-265). Thirty-fifth Yearbook of the National Reading Conference.

Share, D., Jorm, A., Maclean, R., Matthew, R., & Waterman, B. (1983). Early reading achievement, oral language ability, and a child's home background. *Australian Psychologist, 18*, 75-87.

Stedman, L., & Kaestle, C. (1987). Literacy and reading performance in the United States, from 1880 to the present. *Reading Research Quarterly, 22*, 8-46.

Sulzby, E. (1985). Children's emergent reading of favorite storybooks: A developmental study. *Reading Research Quarterly, 20*, 458-481.

Sulzby, E. (1986a). Children's elicitation and use of metalinguistic knowledge about words during literacy interactions. In D. Yaden & S. Templeton (Eds.), *Metalinguistic awareness and beginning literacy: Conceptualizing what it means to read and write* (pp. 219-234). Portsmouth, NH: Heinemann.

Sulzby, E. (1986b). Writing and reading: Signs of oral and written language organization in the young child. In W. Teale & E. Sulzby (Eds.), *Emergent literacy: Writing and reading* (pp. 50-89). Norwood, NJ: Ablex.

Tannen, D. (1982). Oral and literate strategies in spoken and written narratives. *Language, 58*, 1-21.

Thorndike, R. (1976). Reading comprehension in 15 countries. In J. Merritt (Ed.), *New horizons in reading*. Newark, DE: International Reading Association.

Tizard, J., Schofield, W., & Hewison, J. (1982). Collaboration between teachers and parents in assisting children's reading. *British Journal of Educational Psychology, 52*, 1-15.

Tunmer, W., & Nesdale, A. (1985). Phonemic segmentation skills and beginning reading. *Journal of Educational Psychology, 77*, 417-427.

Wells, G. (1981). Some antecedents of early educational attainment. *British Journal of Sociology of Education, 2*, 181-200.

Wells, G. (1982). Story reading and the development of symbolic skills. *Australian Journal of Reading, 5*, 142-152.

Wells, G. (1985). Preschool literacy-related activities and success in school. In D. Olson, N. Torrance, & A. Hildyard (Eds.), *The nature and consequences of literacy* (pp. 229-255). New York: Cambridge University Press.

Wells, G. (1986). *The meaning makers*. Portsmouth, NH: Heinemann.

White, K. (1982). The relation between socioeconomic status and academic achievement. *Psychological Bulletin, 91*, 461-481.

Table 1

Jamie's Retelling of One Story Segment from *Danny and the Dinosaur*

Text:	Danny loved dinosaurs. He wished he had one. "I'm sorry they are not real," said Danny. "It would be nice to play with a dinosaur." "And I think it would be nice to play with you," said a voice. "Can you?" said Danny. "Yes," said the dinosaur.
Session 1.	He found some dinosaurs. "What do you want to do? Want to go for a ride?" So they went out the door.
Session 2.	He found some dinosaurs. They were big. But one of them looked at him and said, "Hi." [inaudible] "Yes," he said.
Session 3.	. . .and he saw dinosaurs. [long pause] Danny wished they were real. [To adult: I wish they were real, but Danny doesn't know. . .] "It would be nice to play with you," said a voice. "Where should we go?"
Session 4.	. . .and he saw some dinosaurs. Danny looked at them and thought he could have one. They weren't moving. Danny said, "I'm sorry they aren't real, but if they were real, I would play with them." Then a quiet voice said, "I would like to play with you."
Session 5.	. . .and he [pause] saw [pause] dinosaur. He wished he could play with one. [Adult points to text, saying: Look what this says.] Danny loved dinosaurs. He wished he had one. [Adult comments: You just said that good.] "I would like to play with one," said the dinosaur. "You would," said Danny.
Session 6.	And he saw some dinosaurs. He wished he could have one. He said, "I'm sorry they are not real. I wish I could play with them if they were real. "Oh, it would be nice to play with you," said a voice. "Would you?" said Danny. "Yes."
Session 7.	Danny loves dinosaurs. He wished he could have some. "I think I'm s-s-said. [To adult: Is this first or is this first? Adult: This is first--I'm s-sorry.] "sorry they are not real," said Danny. "I wished that I could have some--have one. I wanted--I want to--[To adult: I don't know what this is. Adult: It] "It would be nice to play with you." [Adult: with--] "with a dinosaur." "I am, and I would like to play with you," said a voice. "You would?" said Danny. "Yes I would," said the dinosaur.
Session 8.	And he saw a dinosaur. Dan liked dinosaurs. He wished he could have one--[self-corrects] --Danny loved dinosaurs. He wished he could have one. "I wish that--[self-corrects] --I am sorry they are not real," said Danny. If they were, I wish that I could have one to play with. "It would be nice to play with you," said a voice. "Would you--you would?"

Table 2

Mother and Four-Year-Old Heather Reading the Book Entitled *Snowman*

Mother:	Right here. We'll try this one. [The mother puts the Snowman book which the child had received in the mail that morning in front of Heather and agreed to read.] What is that? [Mother points to picture on cover.]
Heather:	Oh, snowman.
Mother:	So what do you think that book's about? Hmmm? Do you know? [Heather opens book.] What's that?
Heather:	Big egg man. [Heather traces the picture with her finger.]
Mother:	No, that's one big snowball. [Mother points to the first word. Heather turns the page.]
Heather:	Two. [Heather points to picture.]
Mother:	Two what?
Heather:	Two snowballs.
Mother:	Two snowballs. [Heather turns page.] Oh, what was put on there? [Mother points to picture.]
Heather:	Nose, eyes. [Heather points to each in the picture.]
Mother:	Eyes and nose. [Mother points to print as she corrects child.]
Heather:	Eyes and nose. [Heather turns the page.]
Mother:	Ohh, what else?
Heather:	A smile.
Mother:	A smile? [Mother checks that she heard the child correctly.]
Heather:	Uh, huh. [Heather turns the page and shrugs shoulders to indicate that she doesn't know what this page says.]
Mother:	What did you call him when you first opened the book, do you remember? . . . Hi, Frosty.
Heather:	Hi Frosty. [Heather closes the book.]

Table 3

Mother and Four-Year-Old Eric Reading the Book Entitled *Snowman*

The mother asked Eric which story he wanted to read first.

Eric:	I want to do this one about Christmas. [Eric points to the Snowman book.]
Mother:	Snowman?
Eric:	Snowman, yeah, cause it's Christmas already.
Mother:	What is that? [Mother points to picture on cover.]
Eric:	Snowman.
Mother:	I'll bet they're showin' you how to make a snowman, ain't they? [Mother opens book.] See. They made a great big snowball. [Mother points to picture.]
Eric:	No, a circle one. [Eric traces circle with finger.]
Mother:	When it ever snows, maybe we can make a snowman. [Looks enthusiastically at Eric and turns page.] Then we'll make two balls. See, they set this ball on top of this one. [Mother points to picture.]
Eric:	Turn the page.
Mother:	Turn the page? You better look so you'll know how to make a snowman. [Mother turns the page.]
Eric:	Then they made eyes. [Eric points to picture.]
Mother:	What's that? [Mother points to picture of the nose.]
Eric:	Umm, a carrot, umm, nose.
Mother:	Yes [Eric laughs] and there's his eyes!
Eric:	That's a funny nose.
Mother:	A big ole long nose ain't it? [Mother turns page.]
Eric:	And dots for eyes. Dots for eyes.
Mother:	He's smiling. Look at him. [Mother points to picture.]
Eric:	Uh huh. He's happy.

Table 3 (Continued)

Mother:	It says, a great big smile. [Mother points to words as she says them.] Is that a happy snowman?
Eric:	Yes. Well, I want to color it.
Mother:	You want to color it? [Mother turns page.] They even put a hat on it--
Eric:	--You know--[Eric points to page number.]
Mother:	--and a scarf--
Eric:	--number six!
Mother:	Yeah, that's page number six. Look at them funny arms. [Mother points to arms. Eric laughs.] He's only got three fingers.
Eric:	Mommy, I want to color it.
Mother:	Ahh. [Mother closes book.]
Eric:	I want to color--[Eric reaches for his crayons.]
Mother:	No, we got another story book here to look at to see what it's about. You might want to color that. [Picks up other book she was asked to read with the child.]

Table 4

Teachers' Story Book Interactions with Kindergarten Children

Before reading.

T: The name of this book is *Strega Nona, Strega Nona.* — Teacher emphasizes each word of the title and underlines each word with her finger.

C: Wow! That sounds different!

T: That's a different name, isn't it? Does it sound like English?

C: No.

T: No, it sounds like [inaudible].

C: [inaudible]

C: Spanish.

T: Could be Spanish--like when we talked about ah--Christopher Columbus.

C: Know why I think it's Spanish? My brother knows Spanish.

T: Does he? Matthew?

C: It might be French.

T: Maybe. That's another language, isn't it? Maybe it's French.

C: Chinese.

T: This is an old tale retold and illustrated by Tomie de Paola--I think that's how you say his name. — Points to print.

C: It's in French.

T: You think so?

C: No, its in--

Table 4 (Continued)

T: Marlon?	
C: Spanish.	
C: Spanish, yeah.	
T: Well, it doesn't really tell us,	
C: It means to draw the pictures and make the words.	
T: So it looks like the same man, Tomie, drew the pictures, and he retold an old tale. What is it to retell an old tale--you think--Alex?	Points to author's name.
C: It means--to read it all over.	
T: To retell is to read it over again or tell it over again. So he's retelling--he is telling it over again. What is a tale? Matthew?	
C: A tale is some old story that is not true--it won't never, never happen.	
T: Oh, a tale is a story that will never, never happen. Do you agree, Justin?	
C: Ah--Yeah.	
T: A tale--you think a tale is a story--	
C: That never, never happens.	
T: Matthew says that never, never happens. Well, maybe--that might be what this is--a tale is a story that never, never happens. And you notice that when he illustrated this book he did such a good job, he got a prize. The pictures are beautiful.	Points to Caldecott award on cover.
C: He got that little coin.	

Table 4 (Continued)

T: Uh-huh. That's an award that they put on the front of a bock when the pictures are extra nice. So he won an award. By looking at the cover, who do you think or what do you think this book is going to be about? [The discussion continues.]	
During the reading.	
T: [Begins reading text: "In a town of Calabria a long time ago. . . . because Strega Nona did have a magic touch."] Here are the people in the town and some of them are saying, "Do you know what Strega Nona did?"	Points to picture of townspeople. Puts hand around mouth and whispers question.
T: Here come the priest and the sisters of the convent. Now, they seem sort of important. Does anyone know who they are? Who are they, Alex?	Points to picture at bottom of page.
C: They're people from--like churches.	
T: From church, yes, the people from church. And even they went to see Strega Nona. [Reads: "She could cure a headache with oil, water, and a hairpin."] Right up here these three pictures show Strega Nona taking oil--that's what it says on that container--	Points to pictures across top of page. Points to oil.
C: And water.	
T: And some water--from there. And a hairpin from her hair. Now she has a hairpin, probably something that would hold her hair in place-- And some oil--And the word oil O-I-L--	Points to picture and own hair. Picks up a bottle of cooking oil and points to label on bottle.
C: And there's water over here.	Child points to water container on table.

Table 4 (Continued)

T: And some water--and she'd mix those all together and the person would get rid of their headache and feel a lot better. [Story reading continues.]	Puts hand on her head as though suffering from a headache.

After reading.

T: Is this a real story or a pretend story?

C: False--false.

C: A fairy tale.

T: Yeah, it's an old tale. It really isn't true, is it? Is there such a thing as a witch.

C: No.

T: You don't think so?

C: A witch can [inaudible].

C: There can't be--there can't be a magic pot.

[story discussion continues]

Table 5

Correlations Between Parent Questionnaire Variables and Language/Reading Test Variables

	Beginning Kindergarten				End Kindergarten		Beginning Grade 1	End Grade 1	
Parent Questionnaire	Language Understanding	Oral lang. Fluency	Decoding	Env. P Labeling	Decoding	Env. P Labeling	Decoding	Decoding	Reading/ Comprehension
Reading to child at home	.39	.13	.38	.21	.28	.37	.28	.06	.25
No. books at home	.27	.18	.35	.19	.34	.17	.31	.26	.09
Reading and writing by child at home	.31	.21	.51	.23	.48	.47	.47	.29	.18
Help by parents to read & write	.11	.09	.16	.07	.22	.29	.23	.07	.11
Story telling at home	.17	.11	.18	.04	.17	.24	.18	.12	.25
Time spent watching TV	-.10	-.14	-.16	.06	-.12	-.03	-.14	-.13	-.08

Table 6

Reading and Language Test Intercorrelations

	Time 1 Decoding	Time 1 E. Print	Time 2 Decode	Time 2 E. Print	Time 3 Decode	Time 4 Decode	Time 4 Comprehend
Time 1							
Language Understanding	.59	.41	.57	.47	.57	.35	.63
Oral Language Fluency	.22	.21	.22	.21	.23	.26	.20
Decoding	--	.41	.66	.54	.62	.35	.36
E. Print Labeling		--	.33	.59	.40	.33	.19
Time 2							
Decoding			--	.68	.89	.59	.36
E. Print Labeling				--	.70	.43	.32
Time 3							
Decoding					--	.60	.37
Time 4							
Decoding						--	.27
Comprehension							--

Figure 1

Model of Early Reading Development